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IFAS EXTENSION

Rotating Article

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ATTENTION HORSE OWNERS

**MARE REPRODUCTIVE LOSS SYNDROME
AND EASTERN TENT CATERPILLAR**

The University of Florida College of Veterinary Medicine has confirmed one case of Mare Reproductive Loss Syndrome MRLS and has two other cases that are suspect. All three cases occurred in Alachua County this spring. The diagnosis of MRLS was made by Dr. John Roberts, pathologist at the University of Florida College of Veterinary medicine.

One mare produced a septic foal on March 18, 2006 that was euthanatized after two days of intensive treatment. Samples from an earlier abortion on the same farm were re-examined and showed indications of MRLS; Dr. John Roberts, UF pathologist, has termed that case suspect. The third case was a foal born on March 26, 2006, that was treated in the neonatal intensive care unit at the University of Florida for 12 hours before being euthanatized. Although complete histopathologic evaluation will not be completed until March 30, Roberts said the pathology was consistent with MRLS.

Dr. Roberts worked at the University of Kentucky Livestock Disease Diagnostic Center during the Kentucky MRLS outbreak of 2001-2002.

MRLS has not been previously reported in Florida. The Kentucky outbreak suffered severe economic losses estimated to be near \$336-500 million and a loss of 30 percent of the estimated foal crop for 2002.

MRLS has been linked to the consumption of Eastern Tent caterpillars.

Eastern tent caterpillars prefer wild cherry, apple and crabapple. The clinical syndromes include early pregnancy loss, late-term abortions, foals born weak and septic, pericarditis, uveitis, laminitis and oral ulceration.

MRLS Prevention (recommendations developed for Kentucky)

Primary Preventive Measures

1. Minimize or eliminate exposure of pregnant mares to Eastern tent caterpillars.
2. Keep pregnant horses away from wild cherry and apple trees.
3. Frequently mow pastures grazed by pregnant mares.
4. Offer hay to horses on pasture.

Secondary Preventive Measures

1. Increase the grass-to-clover ratio in pastures.

2. Restrict time on pasture when a hard freeze is expected following a warm period.
3. Reduce exposure of pregnant mares to endophyte-infected tall fescue.

Other Measures

1. Mycotoxin binders have been fed by some farms. If mycotoxins are involved, this could help reduce risk. This decision should be made after discussions with a veterinarian and/or nutritionist.
2. Correct mineral imbalances. While this is always a good idea, there is a theory that mineral imbalances might be associated with MRLS. Again, discuss this with your farm's veterinarian and/or nutritionist.

Mare Owners: Take Action

At this time, we strongly recommend that all abortions and foal deaths receive a post-mortem evaluation. Inspection of pastures for the presence of cherry trees and caterpillars is critical. The only way to protect the pregnant mare is to remove her from contact with the caterpillars. Early pregnancy loss can be detected by ultrasonographic evaluation.

For more information, consult the University of Kentucky web page on MRLS at www.ca.uky.edu/gluck/mrls/index.htm or The Horse: Your Guide to Equine Health Care at www.thehorse.com.



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